

**Fossil Sites in Nashville —
A Trip Through Time**

The following sites are good places to find local fossils. They are assigned familiar movie ratings. Sites rated PG have good parking and are separated from major streets.

The sites are listed from the earliest to the most recent (from about 456 - 438 million years ago).

Keep an eye on children while they are fossil hunting. These sites have unstable rocks, broken glass, and occasionally snakes.

NOTE: Most of these sites are on private property. Be sure to ask permission before you start hunting.

Lebanon Pike across from Mount Olivet Cemetery (Carters Limestone) PG-13 In the yard of the building supply company at 1136 Lebanon Pike. You can see the residue of ash falls from two of the huge volcanic eruptions that occurred about 455 million years ago. Look for two horizontal bars. Fossil hunting is better a few doors further west on Lebanon Pike. Look for lots of coral along the road going into the quarry.

Murfreesboro Pike at Plus Park (Carters Limestone/Hermitage Formation) PG-13 Traveling east on I-40, exit at Murfreesboro Pike. At the exit, turn right, and then immediately, turn left into the gas station on the east side of Murfreesboro Pike. Here you will find two little bryozoans, *Prasopora patera* and *Atactoporella insueta*.

Old Hickory and Edmondson Pike, Brentwood (Carters Limestone/Hermitage Formation) PG-13 There are two exposures at this site. Carters Limestone is exposed along Old Hickory Pike. (There aren't many fossils there.) Hermitage is exposed in the quarry behind. At the north end of the quarry you find the Curdsville Bed, with its wide variety of fossils. Further south in the quarry, you find the Laminated Argillaceous Bed, which has almost no fossils.

Windlands Plaza — Nolensville Pike across from Grassmere (Hermitage Formation) PG The site is behind the stores. The bottom two layers of the Hermitage Formation are exposed, just like in the site listed above. Curdsville is at ground level. Laminated Argillaceous starts about five feet up. This is the best place in town to see what an extinction event looks like.

Southwest corner of Inverness & 8th Avenue (Hermitage Formation) PG This is the site to see the end of the Laminated Argillaceous Bed. The bottom 5 feet are a striped rock formation with very few fossils. Above 5 feet, the rock is totally filled with small brachiopods (*Resserella fertitis*). This is not a good site for picking up fossils.

Thompson Lane at the RR Tracks, west of Nolensville Pike (Bigby Formation) PG This is the best place in town to find the little round brachiopods, bivalve mollusks, and snails, that are typical of middle bed of this formation.

Old Hickory Boulevard at Brentwood Oaks (Bigby Formation) PG The Upper Dove-Colored Member exposed here represents one of the periods when Nashville was in a lagoon. Fossils are not too common at this site, but those you do find can be beautiful. Cephalopods and the sponge called *Saccospongia* have been found here.

Charlotte Pike behind Hillcrest Plaza, west of White Bridge Rd (Bigby Formation) PG This site exposes the top bed of the Bigby Formation. A bit of everything has been found here.

Shoneys on Old Hickory and I-65 in Brentwood (Catheys Formation) PG Here you can see the earliest layers of the Catheys Formation. Along the road, the Constellaria Bed, a layer totally dominated by bryozoans, is exposed. In the parking lot, you can see how a *Stromatocerium* reef, the typical formation of the Lower Catheys member, replaced the bryozoans.

Metro Center Boulevard at the Maxwell House (Catheys Formation) PG Look along the road cut north of the Maxwell House. More Lower Catheys

reefs are exposed. NOTE: As of 10/98 at the north end of the site, there is construction. Stay out of this area. It is dangerous!

Ashland City Highway across from the Bordeaux YMCA (Catheys Formation) PG-13 Park behind the shopping center on the north side of the street and walk west. You'll find just about everything here. It is a good site for cephalopods and gastropods, but corals, brachiopods and a trilobite have been found.

Moose Lodge on Charlotte Pike near Old Hickory Boulevard (Catheys Formation) PG-13 This is an Upper Catheys exposure. There are lots of large brachiopods, particularly *Rafinesquina* and bryozoans - *Heterotrypa*.

Route 70 South at Red Caboose Park (Leipers Formation) PG The park is at Route 70 and Colice Jeanne Road. There are road cuts on both sides of Route 70 east of the park. There are a lot of brachiopods, mostly *Platystrophia*, as well as snails here.

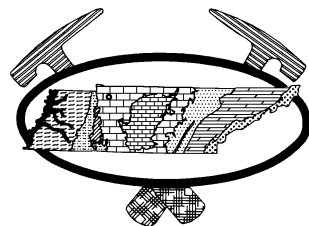
Old Hickory Boulevard in Bellevue, east of Sam's (Leipers Formation) PG-13 Driving east on Old Hickory Boulevard from I-40, go to the top of the hill east of Sam's. Park at the barricaded road heading down the hill to the right, and walk down the road. You find the large brachiopods and bryozoans, which are typical of Leipers Formation.

REMEMBER: The future of fossil hunting in Nashville depends on the good behavior of current fossil hunters. Whenever you hunt fossils, please:

- Ask permission politely. Remain polite even if refused.
- Follow all rules the owners lay down.
- Don't damage or climb rock faces.
- On roadcuts, pick up garbage. Leave the site cleaner than you found it.

**Fossil Hunting in
Nashville**


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Brachiopods

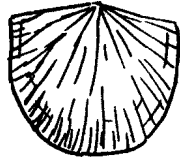
Brachiopods are filter-feeding animals that live in small sea shells. Although the shells resemble mollusk shells, the animals are quite different. Brachiopods are still alive today, although they mostly live in deep water, where people don't see them.



Resserella
(Hermitage)



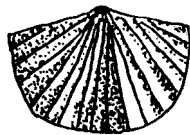
Rhynchotrema
(Bigby)



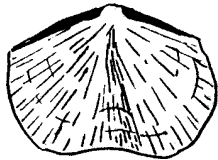
Rafinesquina
(All layers)



Zygospira
(Bigby, Catheys)



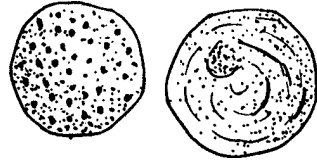
Platystrophia
(Bigby, Catheys,
Leipers)



Hebertella
(Bigby, Catheys,
Leipers)

Bryozoans

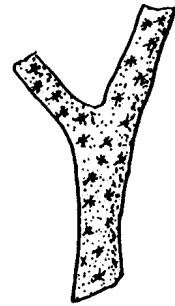
Bryozoans are colonies of tiny filter-feeding animals. The colonies can take many forms. *Prasopora* forms a lens-shaped colony over a brachiopod shell. *Atactoporella* covers small snails. Others form tree-like or frond-like, free standing colonies. Bryozoans are also still alive today. They often grow on the bottoms of boats and make nuisances of themselves.



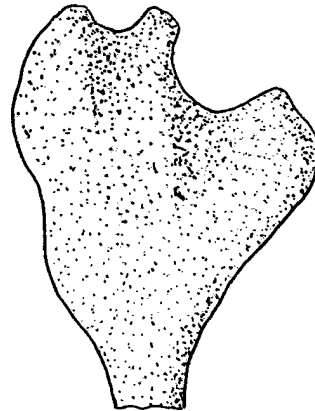
Prasopora
(Hermitage, Bigby)



Atactoporella
(Hermitage)



Constellaria
(Bigby, Catheys)



Heterotrypa
(Catheys, Leipers)

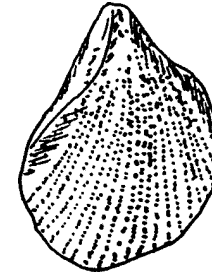
Mollusks

There are three kinds of mollusks found in Nashville:

- clam-like bivalve mollusks, called pelecypods;
- snails, called gastropods;
- cephalopods, shelled relatives of squid and octopi.



Cyrtodonta
(Bigby, Catheys)



Byssonychia
(Bigby, Catheys,
Leipers)



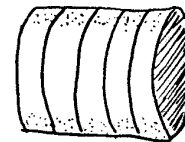
Hormotoma
(Bigby)



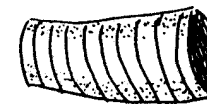
Cyclonema
(Catheys)



Lophospira
(Bigby, Catheys)



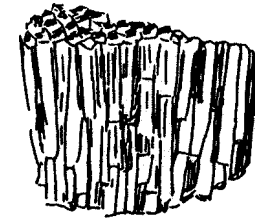
Actinoceras
(All layers)



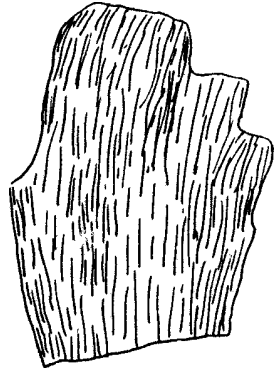
Cyrtoceras
(Catheys)

Reef Builders

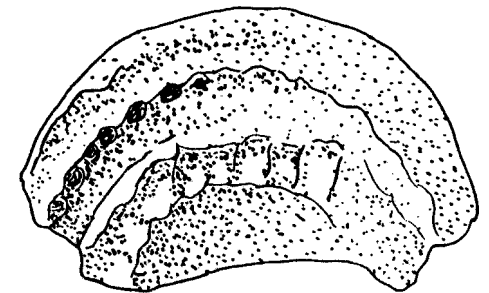
Evidence of reefs can be found in Carters Limestone and the Catheys Formation. These reefs were built by the same three animals: two corals, *Columnaria* and *Tetradium*; and concentric masses of cyano-bacteria called *Stromatocerium*, which, although common in mid-Paleozoic seas such as those that laid down the rocks of Nashville, still barely persist in a few sheltered localities around the world.



Columnaria
(Carters, Bigby,
Catheys)



Tetradium
(Carters, Bigby,
Catheys)



Stromatocerium
(Carters, Catheys)